

Denouement and Discussion

Ulcerated Infantile Hemangioma

An ulcerated infantile hemangioma was diagnosed in this otherwise healthy infant. Further workup showed normal renal, scrotal, and spinal ultrasonography results. Wound cultures revealed normal regional flora. On diagnosis, ceftriaxone and vancomycin therapy was discontinued and instead a mixture of mupirocin and gentamicin sulfate ointments was applied to the ulcer 3 times per day followed by liberal application of a thick barrier cream. The patient was subsequently discharged from the hospital and followed up as an outpatient 5 days later. The ulceration had progressed and the patient was started on 3.0 mg/kg/d of prednisolone for 3 weeks, at which point he began a 2-week taper. The gentamicin and mupirocin ointments and barrier cream were continued. Acetaminophen was given as needed for pain control.

The patient was followed up weekly. Marked improvement with granulation of the ulcer was noted until 6 weeks after the initial presentation. At this point he developed a third area of ulceration. He was restarted on 1.5 mg/kg/d of prednisolone for 10 days, following which he continued to improve with no further episodes of ulceration. The patient experienced a minor elevation in blood pressure that resolved on discontinuation of the corticosteroid. Three and a half months after admission, the ulceration had fully healed with a small amount of residual scarring (**Figure 2**).

Infantile hemangiomas (hemangiomas of infancy) are the most frequently occurring benign soft tissue tumors of childhood. It is estimated that 3% to 10% of white infants develop an infantile hemangioma by age 1 year.¹ These hemangiomas occur more frequently in girls, white individuals, premature infants, products of multiple gestations, and infants of mothers with advanced maternal age, placenta previa, or preeclampsia.² Most infantile hemangiomas are clinically insignificant and regress spontaneously without a problem. However, they can occasionally become troublesome should they ulcerate, bleed,

cause a high-output cardiac failure, or impinge on other structures.

Ulceration is the most common complication of infantile hemangiomas, occurring in 5% to 13% of all lesions.³ Ulceration occurs during the proliferative phase of the hemangioma. Hemangiomas located in and around the perineum have the greatest risk of ulceration, presumably owing to increased moisture, frictional stress, and exposure to stool and urine.³ Treatment of ulcerated perineal hemangiomas involves local wound care, pain control, and treatment of infection with topical or systemic antibiotics, depending on wound severity. Metronidazole gel, mupirocin ointment, and topical and systemic corticosteroids have all been used to treat ulcerated hemangiomas.³ Pulsed dye laser and, recently, becaplermin gel have been used as helpful adjuncts in the treatment of ulcerated infantile hemangiomas.^{4,5} Superficial perineal infantile hemangiomas have been associated with developmental abnormalities, such as the SACRAL syndrome (spinal dysraphism, anogenital anomalies, cutaneous anomalies, and renal and urologic anomalies associated with angioma of lumbosacral localization) and the PELVIS syndrome (perineal hemangioma, external genitalia malformations, lipomyelomeningocele, vesicorenal abnormalities, imperforate anus, and skin tag).⁶ For this reason, it is recommended that infantile hemangiomas located in the perineal region be evaluated for such associated abnormalities.⁷

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Figure 2. Three and a half months after treatment, the infantile hemangioma resolved with a small amount of residual scarring on the scrotum and the ventral surface of the penis.

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